AMENDMENT TO THE SPECIFICATION:

Please replace the paragraph beginning on page 15, line 28, with the following amended paragraph:

One method to make the abrasive article of the invention illustrated in **FIG. 1** is illustrated in **FIG. 8**. Backing **841** leaves an unwind station **842** and at the same time the production tool **846** leaves an unwind station **845**. Production tool **846** is coated with slurry by means of coating station **844**. It is possible to heat the slurry and/or subject the slurry to ultrasonics prior to coating to lower the viscosity. The coating station can be any conventional coating means such as drop die coater, knife coater, curtain coater, vacuum die coater or a die coater. During coating the formation of air bubbles should be minimized. The preferred coating technique is a vacuum fluid bearing die, such as disclosed in U.S. Pat. Nos. 3,594,865, 4,959,265, and 5,077,870, all incorporated herein by reference. After the production tool is coated, the backing and the slurry are brought into contact by any means such that the slurry wets the front surface of the backing. In **FIG.** ~~**2**~~ **8**, the slurry is brought into contact with the backing by means of contact nip roll ~~**947**~~ **847**. Next, contact nip roll ~~**947**~~ **847** also forces the resulting construction against support drum ~~**943**~~ **843**. A source of energy ~~**948**~~ **848** (preferably a source of visible light) transmits a sufficient amount of energy into the slurry to at least partially cure the binder precursor. The term partial cure is meant that the binder precursor is polymerized to such a state that the slurry does not flow from an inverted test tube. The binder precursor can be fully cured once it is removed from the production tool by any energy source. Following this, the production tool is rewound on mandrel ~~**949**~~ **849** so that the production tool can be reused again. Optionally, the production tool may be removed from the binder precursor prior to any curing of the precursor at all. After removal, the presursor may be cured, and the production tool may be rewound on mandrel ~~**949**~~ **849** for reuse. Additionally, abrasive article is wound on mandrel ~~**121**~~ **821**. If the binder precursor is not fully cured, the binder precursor can then be fully cured by either time and/or exposure to an energy source. Additional steps to make abrasive articles according to this first method are further described in U.S. Pat. No. 5,152,917 and U.S. Ser. No. 08/004,929, filed Jan. 14, 1993, both incorporated herein by reference. Randomly shaped

abrasives composites may be made by the tooling and procedures described in U.S. Pat. No. 6,076,248, described above.

Please replace the paragraph starting on page 17, line 7, with the following amended paragraph:

Another method is illustrated in **FIG. 9**. Backing ~~51~~ 951 leaves an unwind station ~~52~~ 952 and the slurry ~~54~~ 954 is coated into the cavities of the production tool ~~55~~ 955 by means of the coating station ~~53~~ 953. The slurry can be coated onto the tool by any one of many techniques such as drop die coating, roll coating, knife coating, curtain coating, vacuum die coating, or die coating. Again, it is possible to heat the slurry and/or subject the slurry to ultrasonics prior to coating to lower the viscosity. During coating the formation of air bubbles should be minimized. Then, the backing and the production tool containing the abrasive slurry are brought into contact by a nip roll ~~56~~ 956 such that the slurry wets the front surface of the backing. Next, the binder precursor in the slurry is at least partially cured by exposure to an energy source ~~57~~ 957. After this at least partial cure, the slurry is converted to an abrasive composite ~~59~~ 959 that is bonded or adhered to the backing. The resulting abrasive article is removed from the production tool by means of nip rolls ~~58~~ 958 and wound onto a rewind station ~~60~~ 960. Optionally, the production tool may be removed from the binder precursor prior to any curing of the precursor at all. After removal of the production tool, the precursor may be cured. In either event, the energy source can be thermal energy or radiation energy. If the energy source is either ultraviolet light or visible light, it is preferred that the backing be transparent to ultraviolet or visible light. An example of such a backing is polyester backing.

Please replace the paragraph starting on page 20, line 13, with the following amended paragraph:

Referring to **FIG. 2**, an abrasive article **200** having a plurality of features **220** is illustrated. The features **220** form an array **210** on the article **200**. Typically, each individual feature **220** has a base 224 and a body 226 with the same vertex 222 height, which is some embodiments is between about 20 and 40 mils. In the example embodiment shown, some

features **220** have different base **224** sizes. The base sizes of each feature in the array can be the same or different, and the particular combination of feature sizes will depend on the particular application. Selection of such characteristics is within the ordinary skill in the art.

Please replace the paragraph starting on page 21, line 15, with the following amended paragraph:

Such a feature as described in the preceding paragraph can be defined using sidewalls defined by sections having a partial parabolic profile. Referring again to **FIG. 4**, the locus **410** of points defining the parabolic section can be divided into four sections **412**, **414**, **416**, and **418**. Opposed sections **412**, **414** could be shifted towards the origin of the graph **400** by **X2** and **X1** respectively. This would eliminate sections **416**, **418** to form a profile for opposed sidewalls defined by a parabolic function while at the same time creating a sharp cutting edge at the vertex of the feature. An example of such a profile is illustrated in graph **500** of **FIG. 5**. The profile includes opposed parabolic sections **512**, **514** to form a profile **520** for opposed sidewalls for a feature having a height of 14 mils (1 mil = 0.001 inch). A tooth angle σ is formed in the profile. The tooth angle σ is formed by summing individual tooth angles $\sigma 1$, $\sigma 2$ formed by each section **512**, **514**. In the context of this disclosure, "tooth angle" is defined as the included angle formed between lines connecting the peak of a feature with its outermost base section, as can be seen as illustrated in **FIG. 5**. Lines **L1** and **L2** intersect at the peak **P1** and each projects to the outmost edge of the base. Each partial tooth angle $\sigma 1$, $\sigma 2$ is measured from a perpendicular line extending from the base to the peak **P1**.

Please replace the paragraph starting on page 22, line 4, with the following amended paragraph:

In other embodiments, it is preferred to have a feature that uses asymmetric profiles to define the body. Referring to graph **600** of **FIG. 6**, a profile **620** for a feature with a nominal vertex height of 14 mils is shown. Parabolic sections **612**, **614** define the profile. Sidewall sections are arranged such that each profile has a different individual tooth angle $\sigma 3$, $\sigma 4$. A parabolic locus defines section **614** for a feature that would have a nominal height of 15.6 mils if

not truncated, and a nominal width of 23.75 mils. A parabolic locus defines **612** for a feature that would have a nominal height of 23.3 mils if not truncated, and a width of 32 mils. The profile **620** formed by combining section **612, 614** results in a feature having a cutting tooth with a pointed vertex, which increases initial cut when abrading a workpiece with an abrasive article having features as described. Lines **L3** and **L4** intersect at the peak **P2** and each projects to the outmost edge of the base. Each partial tooth angle σ3, σ4 is measured from a perpendicular line extending from the base to the peak **P2**.

Please replace the paragraph starting on page 22, line 14, with the following amended paragraph:

Another example embodiment of an asymmetrical feature profile **720** is illustrated in graph 700 of **FIG. 7**. The profile **720** is for a feature with a nominal vertex height of 14 mils. Parabolic sections **712, 714** define the profile. Sidewall sections are arranged such that each profile has a different individual tooth angle σ**5**, σ**6**. A parabolic locus defines section **714** for a feature that would have a nominal height of 15.6 mils if not truncated, and a width of 23.75 mils. A parabolic locus defines **712** for a feature that would have a nominal height of 15.5 mils if not truncated, and a width of 23.7 mils. The profile **720** formed by combining section **712, 714** results in a feature having a cutting tooth with a pointed vertex, which increases initial cut when abrading a workpiece with an abrasive article having features as described. Lines **L5** and **L6** intersect at the peak **P3** and each projects to the outmost edge of the base. Each partial tooth angle σ**5**, σ**6** is measured from a perpendicular line extending from the base to the peak **P3**.

Please replace the paragraph starting on page 23, line 2, with the following amended paragraph:

Referring to **FIG. 3**, an abrasive article **300** according to the present disclosure was made. The article **300** included an array **310** of features ~~320~~ 346, 356, 376 arranged on a backing material (not shown). The features ~~320~~ were arranged so that the features ~~320~~ were offset. Each feature ~~320~~ had a height at its vertex most distally located from the backing of about 30 mils (1 mil equals 0.001 inch). Various base sizes were used, including features **356** having a base 20 by

20 mils (such as defined by sidewalls **351**, **352**, **353**, **354**, features **376** having a base 20 by 30 mils (such as defined by sidewalls **371**, **372**, **373**, **374**), and features **346** having a base 30 by 30 mils (such as defined by sidewalls **341**, **342**, **343**, **344**). Each feature **346**, **356**, **376** was included a body defined by parabolic sections.